

Patent  
Attorney's Docket No. 033703-001

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of	)	
	)	
Brian McGUIRE	)	Group Art Unit: 2877
	)	
Application No.: 09/972,896	)	Examiner: Michael A. Lyons
	)	
Filed: October 10, 2001	)	Confirmation No.: 4470
	)	
For: WIND SHEAR DETECTION	)	
SYSTEM	)	
	)	
	)	
	)	

**PROPOSED CLAIMS FOR DISCUSSION**

1. (Currently amended) A method of detecting a windshear condition in a remote atmosphere in front of an aircraft, the method comprising the steps of:
  - (a) projecting a series of optical pulses into a remote atmosphere ahead of the aircraft;
  - (b) detecting backscattered light ~~a series of reflected optical responses~~ from the remote atmosphere corresponding to reflections from a series of ~~at least two predetermined~~ ~~different~~ distances in front of the aircraft greater than 200 meters away from the aircraft;
  - (c) processing said reflected responses from the remote atmosphere to determine a current relative wind speed at said series of ~~predetermined~~ distances in front of said aircraft;
  - (d) processing said current relative wind speeds to determine if a windshear event is present in the vicinity of the back scattering of said backscattered light ~~wind profile~~

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~~indicating a windshear condition exists in front of said aircraft in the vicinity of the~~  
~~predetermined different distances.~~

11. (Currently amended) A method of detecting current wind velocity at a series of predetermined different distances exceeding 200 meters from an aircraft along a flight path of the aircraft and determining when differences in the detected wind velocities exceed a predetermined amount, the method comprising the steps of:

- (a) projecting a series of optical pulses into an atmosphere ahead of the aircraft;
- (b) detecting backscattered light ~~a series of reflected optical responses~~ from at least two positions in the remote atmosphere corresponding to reflections from a series of the predetermined distances in front of the aircraft greater than 200 meters away from the aircraft;
- (c) processing said ~~series of reflected optical responses~~ from the remote atmosphere to determine a current relative wind speed at said series of predetermined distances in front of said aircraft; and
- (d) processing said current relative wind speeds to determine if a windshear event is present in the vicinity of the back scattering of said backscattered light ~~alteration in the wind velocity exceeds said predetermined limit in front of said aircraft in the region of said reflections.~~